

Texas OH008473
Annual Report of Major Outputs and Outcomes
July 1, 2011-June 30, 2012
Occupational Health and Safety Surveillance: Fundamental Program

Texas Department of State Health Services/Environmental Epidemiology and Disease Registries
Section/Environmental and Injury Epidemiology and Toxicology/Occupational Health Indicators Program

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Overview

We believe that a state-based occupational condition surveillance system can provide information essential to protecting workers by determining underlying causes of injuries and illnesses in the workplace, investigating workplace practices, directing intervention strategies, and evaluating the effectiveness of those strategies.

The overall aims of the Texas Fundamental program are:

- Annually compile and report data for 19 occupational health indicators (OHIs)
- Identify patterns and trends for the OHIs
- Train and educate health professionals and workers to enhance awareness and prevention of workplace injuries and illnesses

Major Accomplishments

Surveillance:

Compiled and reported Texas OHI data

- Compiled and reported Texas' 2008 and 2009 OHI data to CSTE and NIOSH
- Provided edits/updates for the OHI "How to Guide"
- Piloted and critiqued Access database tool for calculating indicators
- Addressed one of the findings of the 2009 surveillance evaluation by partnering with University of Texas and Texas A&M to identify research topics on occupational safety and health and to work with graduate students to provide data for more indepth analyses
- Explored effective assessment measures of public health outcomes

Conducted detailed analysis to identify patterns and trends for the occupational health indicators

- Examined trends of occupational non-fatal and fatal injury rates in the Transportation and Warehouse private industry sector of Texas 2005-2009 as compared to that of the US
- Examined temporal trends in non-fatal occupational injuries attributed to musculoskeletal disorders reported in Texas and the US 2003-2009.
- Updated acute occupational pesticide exposure data in the South Texas Health Status Review; this update informs the University of Texas Health Science Center's Institute for Health Promotion that the incidence of acute occupational pesticide poisoning in South Texas (0.8 per 100,000) is slightly below that of the rest of Texas (1.0 per 100,000). This information may influence their outreach activities.

Piloted other data sources for potential to identify cases of occupational illness and injury

Assessed poison center call data to identify occupational chemical exposure reports at water treatment plants.

Outreach and Prevention Efforts

Provided training and education to enhance awareness and increase prevention.

- Provided information and held educational sessions across Texas to a variety of stakeholders/audiences (e.g. Texas A&M Regional Colonias Programs)
- Participated in the NIOSH occupational health RSS clearinghouse, the WESTON meeting in Denver, the Occupational Health Surveillance Partners Meeting in Orlando
- Hosted the winter meeting of the states currently participating in SENSOR pesticide surveillance and presented Texas occupational pesticide exposure data
- Carry forward of federal funds allowed the program to respond to a training need in El Paso which brought together professionals from the Texas Institute of Occupational Safety and Health and the Southwest Center for Occupational and Environmental Health to offer a 4-hour accredited workshop for physicians and other health professionals in the essentials of occupational and environmental medicine and practical aspects of medical toxicology

Plans Year 3- July 1, 2012 through June 30, 2013

To accomplish Year 3 specific aims DSHS staff intend to 1) compile and report 19 Occupational Health Indicators for Texas 2010 data; 2) work with Texas A&M University School of Rural Public Health graduate students to identify research/practicum topics for detailed analysis in order to identify patterns and trends for occupational health indicators; 3a) explore the feasibility of using the 2011 OSHA fatality listing for more in-depth analysis as well as 3b) pilot analysis of the 2007 vital records data set that has been coded for occupation/industry using NIOSH's algorithm; 4a) provide training and education to stakeholders to enhance awareness and increase prevention of workplace injuries, 4) continue reorganization of DSHS occupational health webpage and improve/enhance Spanish counterpart webpage to better reach out to the Hispanic labor force; 5) review and evaluate the Texas occupational health and safety surveillance process; and 6) assess the public health outcomes of the occupational health and safety surveillance system.

Publications

Soo-Jeong Lee, Prakash Mulay, Brienne Diebolt-Brown, Michelle J. Lackovic, Louise N. Mehlers, John Beckman, Justin Waltz, Joanne B. Proado, Yvette A. Mitchell, Sheila A Higgins, Abby Schwartz, and Geoffrey M. Calvert. Acute Pesticide Illnesses Associated with Off-Target Pesticide Drift from Agricultural Applications—11 States, 1998–2006. *Environmental Health Perspectives* 119:1162-1169 (2011).
Doi:10.1289/ehp.1002843 [Online 6 June 2011]

Kastner EJ, Keralis J, Mehl... Gender differences in Acute Pesticide-Related Illnesses and Injuries Among Farmworkers in the United States 1998-2007. *Am J of Ind Med* [accepted 16 March 2012]

Hudson, N, Kasner EJ, Beckman J, Mehler L, Schwartz A, Higgins S, Bonnar-Prado S, Lackovic M, Mulay P, Mitchell Y, Larios L, Walker R, Waltz J, Moraga-McHaley S, Roisman R, Calvert GM. Characteristics and magnitude of acute pesticide-related illnesses associated with pyrethrin and pyrethroid exposures—11 states, 2000-2008 [under review]